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BUSINESS MODEL DESIGN FOR NEW BUSINESS DEVELOPMENT AT PTB DIALYSIS CLINIC CHAIN

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Abstract—*PTB is subsidiary of B Company, a German health care supplier. Division AV of PTBB focuses on dialysis products and services. As Division AV started direct business in 2009, PTB expects it can be growth driver in 2011-2015. The research aims to recognize and create external opportunity in dialysis service provider, to explore internal resources, and to develop new business model of PTB dialysis center. Corporate entrepreneurship framework is applied to provide solution. The research methodology is qualitative approach by semi-structured interview. The discussion points are put business model framework and synthesized into PTBB dialysis service provider business model. The result shows key issues as external opportunity and internal resources. Kidney failure patient in Indonesia has huge potential because limited specialists and dialysis center capacity, expensive cost of treatment, and limited access to reimbursement scheme. Dialysis service is dominated by hospital-based dialysis unit. However, hospital-based dialysis unit capacity cannot fulfill demand of patients. Stand-alone dialysis clinic development is opportunity. However, it has challenges in complicated permit, higher investment, and lack of support in reimbursement. PTB has several internal resources that can be utilized. The proposed business model solution is standardized and interconnected dialysis clinic chain,. The dialysis clinic chain focus on JAMKESMAS/DA patients and untreated patients. To run this model, important activity is building relationship with coordinator, while important resources are standardized operation procedures and centralized IT.*

Keywords: Corporate Entrepreneurship, Business Model, Dialysis Center, Healthcare Service

I. INTRODUCTION

Company B is a global leading health care supplier from Germany. The company was founded in 19th century and is still owned by 6th generation of founder family. It develops, manufactures, and commercializes over 30,000 medical products and various services for worldwide health care market. Company B has four divisions that focus their products and services toward different medical fields, which are: Division HC, AE, OPM, and AV. PTB is Indonesian subsidiary of Company B and was founded in 2000. PTB divides its business work periods into of three: I (2000-2005), II (2006-2010), III, (2011-2015). Division HC was the growth driver in period I and Division AE was the growth driver in period II. PTB plans Division AV to be growth driver in period III (2011-2015).

Division AV focuses in medical products and services concerning extracorporeal blood treatment. This division provides dialysis centers and involved in dialysis and apheresis. Hemodialysis (HD) products and systems are the division's core business. Division AV employs several business models, including: (1) Buy outright, which hospitals directly purchase the HD machines and consumables, (2) Pay-per-treatment, which PTB places equipment and provides consumables, hospitals prepare space and run HD services, (3) Service provider, which hospitals prepare space, PTB set up the space and run the HD services. In Indonesia, Division AV started in 1996, before PTB became subsidiary in 2000. In 2005, PTB outsourced Division AV to sole distributor. In 2008, PTB decided to take back and run AV business by itself because of unsatisfied development in distributor. In 2011, the writer was appointed to develop AV business. PTB management expects AV Division can be the growth driver for PTB in period III.

To be growth driver, Division AV should have complete business model portfolio to accommodate faster growth than average PTB's growth. In PTB, Division AV employs only Buy outright and Pay-per-treatment business model. Based on experience from other B's subsidiary, Division AV needs to complete all business model portfolio, and specifically employs Service provider business model. At the moment, PTB does not employ Service provider model because PTB core business model (product marketing and sales) is different from Service provider model (healthcare service). On the other hand, dialysis service provider has various models among B's subsidiaries. Each country has different opportunity and challenges in dialysis service market. The decision which service provider to be implemented in Indonesia needs comprehensive analysis based on local external opportunity and challenges, and also internal situation in particular country. Thus, this study aims to design new business model for PTB dialysis service provider, particularly to recognize and create external opportunity in dialysis service market, to identify internal resource of PTBB as parent company, and finally to design new business model for PTBB dialysis service provider.

The study is limited to the preliminary business model study, since there are time constraint and complexity in business and market structure of dialysis service provider market. This restricted author to conduct a thorough and detailed study.

II. BUSINESS ISSUE EXPLORATION

Business sustainability depends on its ability to grow over the long term. Corporate entrepreneurship is a strategic answer for organic growth challenge. It is an important component of a well-balanced, long-term growth portfolio, together with company's traditional innovation programs and new business development efforts, such as research and development, corporate venture capital, and acquisitions (Wolcott and Lippitz, 2010).

Corporate entrepreneurship basically is new business design that largely about defining and implementing new and unfamiliar business models. IBM (2006) separates innovation types as products/services/markets innovation, operational innovation, and business model innovation. Magretta (2002) defines business models as 'stories that explain how enterprises work'. Casadesus-Masanell and Ricart (2007) refers business model term to the logic of the firm, the way it operates and how it creates value for its stakeholders. Chesbrough (2007) described business model performs functions as creating value and capturing a portion of that value.

A. Conceptual Framework

Corporate entrepreneurship consists of opportunity recognition and/or creation, formation of resources, and value creation (Stevenson & Jarillo-Mossi, 1986) inside an established organization that is somewhat distinct from the parent company but that leverages and utilizes its resources (Wolcott & Lippitz, 2007), which is also a holistic innovation that develop all necessary components in designing new business model (Wolcott & Lippitz, 2010). This study uses these definitions as conceptual framework to design business model for PTB Service provider in Indonesia (see Figure 1).

Osterwalder and Pigneur (2010) created business model canvas which visualize business model anatomy. According to them, business model canvas can be visualized into nine basic building blocks that show the logic of how a company intends to make money, which are: (1) Customer Segments, (2) Value Propositions, (3) Channels, (4) Customer Relationships, (5) Revenue Streams, (6) Key Resources, (7) Key Activities, (8) Key Partnerships, (9) Cost Structure. This study uses Business model canvas to analyze and synthesize business model for PTB Service provider in Indonesia.

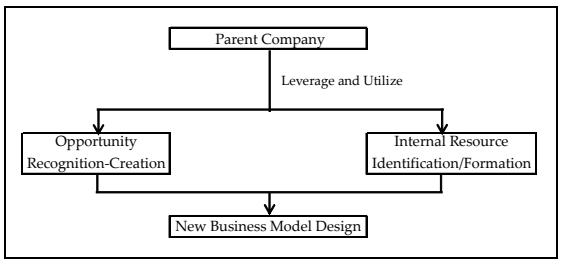

Figure 1. Conceptual Framework

B. Method of Data Collection and Analysis

This study need to answer three main questions, which are external opportunities, internal resources, and new business model design. To answer these questions, this study uses qualitative research methodology, which is in-depth semi structured interview method to collect primary data. The interview method is to gather as much information and clarity of the situation and problem faced in the dialysis service

provider industry and internal resources of parent company.

Major data are interpreted and divided into three main issues in dialysis service provider, which are: external opportunity, internal resources, and business model design. Together with interview data, literature review is enriched discussion. Further analysis of dialysis center comparison uses business model canvas to synthesize new business model.

C. Analysis of Business Situation

First analysis is regarding the external opportunity recognition-creation. External opportunity is classified into disease and patient trend, therapy and its challenges, local dialysis centers, regulation and reimbursement, and supplier of the industry.

Second analysis is regarding the internal resource from Company B. Internal resource is classified into Division BA in global and regional Asia Pacific, PTB as local subsidiary, and local Division BA within PTB.

Third analysis is regarding business model design. Business model design is classified using business model canvas into hospital-based dialysis unit analysis, stand-alone dialysis clinic analysis, and PTBB dialysis clinic chain synthesis.

III. BUSINESS SOLUTION

A. External Opportunity Recognition and Creation

People life style and behavior change in food consumption pattern and physical activities influence the epidemiology of kidney disease or failure. Diabetes, high blood pressure, obesity, smoking, and aging lead to kidney failure. The most common forms of kidney failure are chronic kidney disease (CKD). The most severe stage of CKD is end-stage renal disease (ESRD), which means total loss of the kidney function.

ESRD has shown an almost exponential growth in Indonesia. According to interview, the number of ESRD patient tends to increase over the year. Prodjosudjadi and Suhardjono (2009) reports that estimated, there are around 80.000 ESRD patients in Indonesia. Indonesian Renal Registry report 2012 report shows that the leading cause of ESRD in patients who underwent hemodialysis is chronic glomerulonephritis, diabetes mellitus and obstructive infective kidney diseases (PERNEFRI, 2012).

Renal replacement therapy (RRT) is medical treatment for kidney failure patient and consists of hemodialysis (HD), peritoneal dialysis (PD), kidney transplant (TX). HD is the most therapy and become part of routine medical service for ESRD patients in Indonesia. Total 12,412 ESRD patients were dialyzed in 2006, which comprised only 15.5% of all ESRD patients requiring treatment. The reason of this low ratio of ESRD patient treated is because of high cost of RRT, lack of reimbursement scheme, low number of medical specialists in kidney disease, and less capacity of dialysis center.

Indonesia Renal Registry (IRR) registered 204 dialysis center in 2011. Among these centers, 179 dialysis centers are hospital-based (92%) and only 14 stand-alone clinics (8%). Hospital-based dialysis center is more common than stand-alone clinics in Indonesia, which is reversed compared to global trend. The anomaly happens because hospital-based dialysis unit has less-restricted regulation, has complete supporting facilities, gets referral from kidney experts and other hospitals, and promotes dialysis units by advertising and symposium. However, hospital-based dialysis center number is limited by the hospital number as well. This may prevent the capacity development of dialysis centers.

Stand-alone dialysis clinics have limited service range that can do chronic dialysis for ESRD patients only. Low number of kidney experts is also potential problem for staff recruitment. Lack of medical standard operational procedure is another problem for treatment quality monitoring. In business perspective, limited and unclear government reimbursement scheme for clinics is the biggest problem, since most patients are poor and need government financial support to sustain their therapy. Last, in financial perspective, investment cost for stand-alone dialysis clinics is higher, because it needs basic requirement that hospital-based dialysis unit is supported by hospital. However, stand-alone dialysis clinic development may solve the problem low number of dialysis centers. This business opportunity has not been explored and exploited properly.

Dialysis service provider is characterized by its high potential but cost competitive market. This market has high potential because estimated only 15.5% ESRD patients are treated. However, renal replacement therapy is also cost competitive market because this long-term therapy becomes unbearable burden for patients

and limits their ability to do pay. Government health care coverage supports cost of renal replacement therapy for ESRD patients and burden government limited health care budget. Several ways have been done to reduce renal replacement therapy cost, which are reusing dialyzer for several time, using refurbished machine, operational cooperation scheme (or Pay-per-treatment).

Dialysis center has capacity of patient treatment depends on number of HD machines and number of treatment shifts. Dialysis center normally works on two shifts, 6 working days per week, and minimum 4 HD machines. Therefore, one HD machines can do minimum 12 treatment per week, thus, a dialysis center with 4 machines can do 48 treatment per week. Since one patient needs minimal two therapy per week, therefore this dialysis center can serve up to 24 patients per week.

Ministry of Health regulates standard of dialysis service in Indonesia in 2010 by Peraturan Menteri Kesehatan RI no. 812/MENKES/PER/VII/2010. Hemodialysis services should be performed in health care facilities and should have official permit. The regulation includes also minimum standard, such as infrastructure space, hemodialysis equipments, and man power. However, socialization of this regulation was not clear and well-understood. Based on interview with external parties, socialization of this regulation was not clear and well-understood. Due to low socialization effort, in practice, minimum requirement of dialysis center has various and sometimes less than required by the new regulation. Recommendation from local PERNEFRI chief, nephrologist responsible for respective region, sometimes needs also long time to get. Therefore, local nephrologist support is crucial factors in the development of dialysis center.

Health care reimbursement in Indonesia has various sources and sometimes overlap each other. The reimbursement system includes: (1) central government sponsored community health insurance (JAMKESMAS), (2) provincial government sponsored health insurance (JAMKESDA); (3) government-owned health care insurance, which covers mostly civil servant, civil servant retiree, military/police retiree (ASKES); and (4) worker social security plan (JAMSOSTEK). According to the government, about 60 percent of total Indonesian people have been insured by the government health care coverage programs, comprising of 76.5 million people covered by the JAMKESMAS; 31 million by the JAMKESDA; 14 million by ASKES, and 3 million by JAMSOSTEK (Jamsos, 2011). In 2014, healthcare function of these reimbursement systems will be merged into BPJS Kesehatan (Badan Pelaksana Jaminan Sosial Kesehatan). ASKES will be the leader of BPJS Kesehatan merger process. Several uncertainties can affect BPJS Kesehatan reimbursement on current RRT reimbursement system, which are dialysis supplier restriction and unfavorable reimbursement system for stand-alone dialysis clinics. These uncertainties may affect RRT reimbursement scheme and need to be managed.

Several supplier companies play as supplier company of hemodialysis product for dialysis center in Indonesia. These players and their business model are: (1) FMC, German company focusing on dialysis product-services and now market leader in Indonesia; (2) SRU, local company which has sole distributorship on Japanese brand of N; (3) MNJ, local company which has sole distributorship on Chinese brand of J; (4) MLH, local company which has sole distributorship on Sweden brand of G, (5) other small companies with several distributorship.

In Indonesia, dialysis service providers are mostly hospitals, which employ hospital-based dialysis unit model. MLH is the only one known player owns and operates several dialysis centers. MLH owns and operates around 10 dialysis centers, mainly in Jakarta. MLH operates hospital's or clinic's dialysis centers by providing all investment and run operation. MLH get income from revenue sharing from the hospital. Patient pays HD service to hospital after the treatment, and hospital pays MLH in monthly basis. For business development, MLH offers cooperation with nephrologists or other parties, such as private investors. The cooperation scheme is nephrologists or other parties prepare spaces and MLH prepares initial investment, including renovation and equipments, and runs the dialysis operation. Both parties share revenue from the business income. MLH has cooperation with several local governments in JAMKESDA scheme, but does not have cooperation with JAMKESMAS, ASKES, and JAMSOSTEK, which serve broader patient base. This limits MLH in developing further business for broader patient base and outside Jabodetabek.

B. Internal Resources Analysis

Company B traditionally focuses on innovative product manufacturing. Company B entered service provider business later, especially in dialysis center service provider. By entering service provider business, Company B did downstream vertical integration. It expanded its operation not only to produce dialysis product, but also go to downstream activities by providing dialysis service directly to ESRD patients. Company B owns and operates dialysis center in Europe, Asia, and South Africa. It owns total 180 units of both stand-alone dialysis clinics and hospital-based dialysis unit in these regions. Company B manages also operational activities in some dialysis centers owned by other entities.

Division BA global has developed some guidelines and tools for dialysis center operation. B's subsidiaries can also share among each other regarding the development of dialysis centers. However, each country subsidiary should craft its own dialysis center development plan. The reason is that each country has different local regulation in setting up and operating dialysis center. Medical regulation is very strict in many countries due to its sensitivity in patient treatment. Important guidelines and tools in Division BA for dialysis center operation include: (1) Financial feasibility study guideline for dialysis center setup; (2) Standard operational procedures (SOP) guideline; (3) Training material for dialysis center staff; (4) Internal quality control team from Division BA global.

Several B's subsidiaries in Asia Pacific have started dialysis service provider business. Subsidiary in Philippines owns and operates 16 dialysis centers in 2011. The dialysis service provider business was started in 1998 and expanded organically by setup new dialysis centers. Now, it plans to grow by acquisition of local dialysis chain. Subsidiary in Malaysia-Singapore has 10 dialysis centers in 2011.

It expands further organically by setup new dialysis centers and inorganically by acquisition of local dialysis chain. Subsidiary in India operates 18 dialysis centers in government hospitals under public-private partnership with local provincial government. It has responsibility to set up and operate all the dialysis centers in the 18 provincial government hospitals. On the other hand, provincial government insurance provides spaces-utilities, and pays per number dialysis treatments. To deal with distance barrier among dialysis centers, subsidiary in India develops information technology (IT) system for interconnection between dialysis centers. This IT provides monitoring system for dialysis chain management and provincial government. This solves common problem in developing country, such as India, that fraud and corruption of government fund and distrust among partners happen in massive scale.

IT system provides transparency for partners and therefore prevents fraud and corruption. To get higher asset utilization, it generally runs dialysis centers in 3 or 4 treatment shifts per day, instead of regular 2 shift per day in several centers. This bring down depreciation cost of equipment per treatment and therefore total cost per treatment. The service provider operation in Asia Pacific subsidiaries brings vast amount of practical knowledge in dialysis center operations. Dialysis center business models in Asia Pacific subsidiaries have many similarities, better than European or African models. Experiences and tools in these subsidiaries can be adapted to PTB business development of dialysis centers.

PTB as the local B's subsidiary is in the business of product marketing, sales, and distribution. PTB does also training and technical service as support in product business. As sole distributor of B products in Indonesia, PTB has good network in hospitals, doctors and nurses, and regulators, such as Ministry of Health and National Agency of Drug and Food Control. Customer and regulator perceive B brands as 'safety in healthcare' concern brand and PTB as company that has good support in safety in healthcare training. B brand has good reputation brings advantages for local Division AV. As newly-developed business of PTB, Division AV is also perceived similar with B's company-level strategy as safety in healthcare concerned company. Some products available in Indonesia from Division HC and AE can be used for the dialysis center. B's product portfolio total offering from all division is an advantage in good perceived quality image and also in term of cost-saving. Interdivisional transfer price is very efficient rather than purchase in the market.

Local Division AV (PTB AV) has medium presence in dialysis market and the 4th largest player in Indonesia dialysis market. Key success factor of PTB is having good quality and high technology of HD machine and good company reputation in other divisions. PTB AV has limited activities in local user education, including exhibition in annual Indonesia Society of Nephrology congress. PTB AV offers buy

outright and PPT business schemes to the market. PTB is not provider partner of ASKES for HD product. However, B brand hemodialysis product is handled by one of exclusive HD provider partner of ASKES.

PTB AV offers newest product portfolio, similar with global offers HD machine, for both Buy Outright and Pay-per treatment model. PTB AV offers complete portfolio for dialysis center investment products and high specification dialysis-related consumable products. PTB AV develop education support for nurse in dialysis service by Nurse Application Specialist. This AV nurse provides training to nurse regarding the dialysis knowledge and skill. The training program includes all operational process in the dialysis clinics, such as hemodialysis, infection control, patient safety, etc.

C. New Business Model Design

Dialysis service model in Indonesia can be divided into Hospital model and Clinic model. Hospital model describes the hospital-based dialysis unit, which means the dialysis service is done within hospital. Clinic model describes the stand-alone dialysis clinic, which means the dialysis service is done in independent clinics outside hospital. Both models are analyzed based on Business Model Canvas by Osterwalder and Pigneur (2010). Further, PTBB dialysis service provider business model (Chain model) is synthesized from both comparison and opportunity-challenge in the market.

Hospital-based dialysis unit business model (Hospital model) focuses on wide customer segments, which are: long-term stable patient, instable critical patient, patients with various payment sources. This model can reach and serve wide customer segments as full-range medical service provider. Hospital model has broad channels, come from nephrologist or internal medicine doctors referral. For customer relationship, hospital may conduct general symposium regarding kidney health, dialysis nurse personal care, and patient gathering. Revenue stream in Hospital model comes from dialysis treatment fee by own-pocket, JAMKESMAS/DA, ASKES, insurance and additional pharmaceutical product sales.

Key activities in Hospital model are 2 shifts dialysis treatment and equipment monitoring-maintenance. Key resources are certified doctor-nurses and dialysis equipment. Key partners for Hospital model are dialysis supplier company, ministry of health and PERNEFRI. Cost structure consists of equipment investment cost, operational cost, such as consumables, man power, and utility cost. Hospital has cost advantage due to wide economic of scope by providing full range of medical service. However, most hospital has less economy of scale due to less productivity of dialysis units. Most dialysis units run at average of four HD machines and two treatment shifts. Hospital cannot run more machines because resources competition among other internal services, especially in space and worker. Depreciation cost can be minimized if hospital utilizes more HD machines and more treatment shifts.

Clinic model focuses on narrower customer segments, which are dialysis service for long-term stable patients, patients with limited payment sources, such as personal source, limited JAMKESMAS/DA, and charity. To customer targeted segments, Clinic model offers value proposition of dialysis service for life-extending care in ESRD patient, limited emergency facility and emergency transport to referral hospital. Clinic model offers also less risk in hospital associated infection (HAI). Clinic model employs limited channels, mainly from external doctors referral (nephrologist or internal medicine), walk in patients, community referral, and low-cost social media.

Clinics model uses dialysis nurse personal care as customer relationship that makes patient-nurse and among patients relationship has stronger bond. Revenue stream in Clinic Model comes from patients' own-pocket which pay for dialysis treatment, and in limited clinics, JAMKESMAS/DA. Clinics gets revenue stream also from pharmaceutical product separated from dialysis treatment. Key activity in Clinic model is mainly also 2 shifts dialysis treatment and equipment monitoring-maintenance. Key resources are doctor and nurses which are certified from dialysis training hospital and good dialysis equipment are also important. Key partners for Clinic model are hospital referral, dialysis supplier company, ministry of health, and PERNEFRI.

Cost structure in Clinic model consists of equipment investment cost, operational cost, such as consumables, man power, utility cost, and space cost. Clinic space can be taken from rental space or purchase building. Clinic does not get any cost advantage for economic of scope and economy of scale due to narrow customer

segment and has less productivity. Most stand-alone dialysis clinics run at average of four HD machines and two treatment shifts. Clinic has less HD machine utilization machines because it has limited patients can be treated. Fix depreciation cost from investment can be minimized by utilizing more machine and more treatment shifts.

Key Partners	Key Activities	Value Proposition	Customer relationship	Customer segments
• Hospital referral • MoH (Regulator) • PERNEFRI • Referring doctor	• 3 shift dialysis treatment • Equipment maintenance • Relation building to JAMKESMAS/DA • Worker standardization	• Chronic Dialysis for ESRD • Basic Emergency Facility • Transport to hospital • Less risk to HAI • Treatment cost: Rp 500,000 • Standardized and online-connected dialysis network • Administration support for reimbursement patient	• Nurse personalized care • Multi center patient community gathering	• JAMKESMAS/DA Patients • Charity Patients • Untreated Patients • Private Patients • Long-term stable Patients
	Key Resource • Certified nurse & doctor • Standardized equipment • SOP for 3 shift treatment • Centralized IT System		**Channels** • Walk-in patient • Doctor referral • Community referral • Social Media	
Cost Structure			**Revenue Streams**	
• Slightly higher investment cost • Consumables cost • Man power cost • Utility cost (including IT) • Rental (place) cost • Standardization cost			• JAMKESMAS/DA reimbursement ~ BPJS in 2014 • Charity fund support • Pharmaceutical and food supplement product selling	

Table 1. Dialysis Center Chain Business Model (Chain Model)

PTB dialysis service provider business model (Chain model) is designed as growth driver for PTB in Period III (2011-2015). It considers analysis of external both Hospital model and Clinic model, and also internal parent company resources. Chain model reaches and serves only narrower customer segments, such as JAMKESMAS/DA patients, charity patients, and untreated patients. Untreated patients cannot finance hemodialysis treatment and comprise of 84.5% of total ESRD patients. They have low income economy, less educated, and has no access to government reimbursement scheme. Chain model can also accommodate dialysis service for long-term stable patients. To customer targeted segments, Chain model offers value proposition of basic dialysis service, limited emergency facility, emergency transport to referral hospital. and less risk in hospital associated infection similar to Clinic model.

Chain model develops several dialysis clinics network that is standardized and online-connected, and administration support for reimbursement patient to help untreated patients to access reimbursement scheme. Chain model employs limited channels, from external doctors referral, walk in patients, or community referral. For promotion to general people, clinic advertises in social media. Chain model builds customer relationship with dialysis nurse personal care and patient community building. Revenue stream comes from JAMKESMAS/DA reimbursement and BPJS Kesehatan in 2014, charity fund donation and pharmaceutical product sales. Key activity in Chain model is three shifts basic dialysis treatment to increase productivity, equipment monitoring and maintenance, relationship building to JAMKESMAS/DA coordinator, and health care worker standardization in chain. SOP and training material from Global Division AV can be source of standardization and makes time efficiency in dialysis treatment, and therefore accommodate additional treatment shifts from two to three treatment shifts per day.

Key resources are similar with Hospital and Clinic, but has additional standard operation procedure taken from subsidiary in India model for three treatment shifts per day and centralized Information Technology (IT) system adapted from India IT system. Centralized IT system can promote transparency and continuous monitoring. Key partners for Chain model are hospital referral, Ministry of Health, PERNEFRI, and referring doctors. Dialysis supplier is no longer needed because Chain model uses B products exclusively. Cost structure consists of equipment investment and operational cost. Chain model does not get any cost advantage due

to wide economic of scope. However, it gets economy of scale due higher productivity. Dialysis clinic in Chain model runs at average of 8-10 HD machines and three treatment shifts. Fix depreciation cost per treatment is minimized by utilizing more machine and more treatment shifts (see Table 1).

Hospital model domination over Clinic model in Indonesia happens because several factors, which are easier permit because needs only additional permit to add dialysis unit in hospital, favored by government health care reimbursement fund because of transparency and trust, and has better financial model. However, Hospital model has limitation for further growth, because of limited by hospital number, competition for internal hospital resources.

A chain of healthcare facilities that specialized in dialysis service, such as shown in Chain model, will bring more benefits compared to Hospital and Clinic models. Compared to Hospital model, Chain model can scale up easily because of no limitation by hospital number and fight of resource allocation in internal hospital. Compared to Clinic model, Chain model brings efficiency in permit process, creates transparency with IT system, brings better financial-operation model and economic of scale.

IV. CONCLUSION AND IMPLEMENTATION PLAN

From the finding and discussion, final conclusions for dialysis service provider business model design of PTB Division AV are: external opportunities in dialysis service market in Indonesia are very huge, PTB AV has internal resources that can be used for supporting the dialysis service provider business model in this corporate entrepreneurship scheme, and proposed business model solution is dialysis clinic chain (Chain model), which consists of dialysis clinics network that standardized and interconnected.

Based on analysis and recommended solution, several activities will be done to implement PTB Dialysis Chain business model, which are: develop dialysis clinic chain model feasibility studies, develop relationship with key partners, start pilot project of first dialysis clinic operation, scale up to five dialysis clinics operation within similar region and manage dialysis clinic chain.

REFERENCES

Casadesus-Masanell, R. and J. E. Ricart, 2007, “Competing through business models”. Working paper-713, IESE Business School, Barcelona.

Chesbrough, Henry, 2007. “Why Companies Should Have Open Business Models”, MIT Sloan Management Review. Vol. 48 No. 2

IBM, 2006, “Business Model Innovation Matters”, Global CEO Study 2006: Expanding the Innovation Horizon. pp. 14.

Jamsos, 2011, “SJSN (Sistem Jaminan Sosial Nasional > BPJS”. jamsosindonesia.com [online] Available at: <http://www.jamsosindonesia.com/sjsn/bpjs > [Accessed 21 May 2012].

Magretta, J., 2002. "Why Business Models Matter." Harvard Business Review 80(5): 86-92.

Osterwalder A., and Y. Pigneur, 2010, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Wiley

PERNEFRI, 2012, 4th report of Indonesian Renal Registry 2011. PERNEFRI Bandung, Indonesia

Prodjosudjadi W., and A. Suhardjono, 2009, “End-stage renal disease in Indonesia: treatment development”, Ethnicity & Disease, Volume 19, Spring 2009.

Stevenson, H.H., and J.C. Jarillo-Mossi , 1986, “Preserving entrepreneurship as companies grow”. Journal of Business Strategy, 7(1), pp. 10-24.

Wolcott, R.C., and M.J. Lippitz, 2007, "The Four Models of Corporate Entrepreneurship", MIT Sloan Management Review, vol. 49, no. 1, pp. 75-82.

Wolcott, R.C., and M.J. Lippitz, 2010, Grow from Within: Mastering Corporate Entrepreneurship and Innovation. McGraw-Hill